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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,120	11/06/2000	Stanley W. Adermann	206966	8239

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EXAMINER

ZHEN, LI B

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 07/17/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/707,120

Applicant(s)

ADERMANN ET AL.

Examiner

Li B. Zhen

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other:

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed May 2, 2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 8, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by "Mapping Salutation Architecture APIs to Bluetooth Service Discovery Layer," Version 1.0 (hereinafter Miller).

As to claim 1, Miller teaches a kernel mode translation layer [Salutation Manager, SLM; p. 19, Section 4.3 Salutation Manager Mapping] between the protocol module [L2CAP layer, Fig. 4.2; p. 19] and the application [service discovery user application, SrvDscApp, Fig. 4.2; p. 8, Section 2.2 and p. 19], the translation layer exposes a first interface [SLM generates the appropriate SDP protocol through its TM; p. 19, Section 4.3.1] to the protocol module [L2CAP layer] via a first data protocol [SDP protocol] and the translation layer exposes a second interface [SLM exposes the existing Salutation

APIs; p. 19, Section 4.3.1] via a second data protocol [Salutation Architecture; p. 10, Section 3];

conveying an application communication from user mode to kernel mode such that the conveyed communication is compliant with the second data protocol [Salutation API mapping provides a means to pass SDP primitive attributes to the Bluetooth SDP manager; p. 19, Section 4.3.2];

in the translation layer, receiving the conveyed communication and converting the conveyed communication into a form that is compliant with the first data protocol [p. 15, Section 4 Mapping Bluetooth SDP to Salutation APIs]; and

conveying the converted communication to the protocol module via the first data protocol [SLM generates the appropriate SDP protocol through its TM, handing it off to L2CAP layer; p. 19, Section 4.3.1].

As to claim 8, this is a product claim that correspond to method claim 1; note the rejection to claim 1 above, which also meet this product claim.

As to claim 15, Miller teaches a computing device associated with a Bluetooth radio frequency [Bluetooth protocols; p. 6, Section 2.1] transmitting [local device, LocDev; p. 8, Section 2.2] and receiving device [remote devices, RemDev; p. 8, Section 2.2];

an application residing [service discovery user application, SrvDscApp, Fig. 4.2; p. 8, Section 2.2 and p. 19], in the user mode of the computing device;

a user mode communication module [service discovery component; p. 6, Section 2.1] communicably linked to the application [service discovery user application,

SrvDscApp, Fig. 4.2; p. 8, Section 2.2 and p. 19] and adapted to receive an outgoing communication from the application;

a kernel mode communication module [Transport Manager] adapted to receive the outgoing communication from the user mode communication module and to provide the communication as a kernel mode output [Transport Manager, TM; p. 11, 2nd paragraph of Miller];

a translation layer [Salutation Manager, SLM; p. 19, Section 4.3 Salutation Manager Mapping] residing in kernel mode, adapted to receive the kernel mode output from the kernel mode communication module and to provide a translated outgoing communication [p. 15, Section 4 Mapping Bluetooth SDP to Salutation APIs]; and

a Bluetooth L2CAP-compliant protocol module [L2CAP layer, Fig. 4.2; p. 19] residing in kernel mode for receiving the translated outgoing communication, and for providing an output representative of the outgoing communication which is compliant with the Bluetooth L2CAP protocol [SLM generates the appropriate SDP protocol through its TM, handing it off to L2CAP layer; p. 19, Section 4.3.1].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 – 7 and 9 – 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of “Windows Sockets,” Version 1.1 (p. 4 – 11, hereinafter Hall).

As to claim 2, Miller teaches receiving a connection request at the translation layer to connect to a remote service [Salutation Manager then makes an L2CAP connection with a Bluetooth RemDev; p. 20, Section 4.3.2.1], and causing the translation layer to automatically send and receive communications to the protocol module sufficient to establish a Bluetooth connection [SLM generates the appropriate SDP protocol through its TM, handing it off to L2CAP layer; p. 19, Section 4.3.1]. Miller does not teach a Winsock module.

However, Hall teaches a Winsock module [Windows Sockets; p. 4, Section 2.2.1].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to apply the teaching of a Winsock module as taught by Hall to the invention of Miller because a socket is an endpoint of communication to which a name may be bound and this would allow Windows application to use the Winsock module to communicate with Bluetooth devices.

As to claim 3, Miller as modified teaches a helper module [service discovery component; p. 6, section 2.1], sending a connection indication that comprises an indication that connection information usable to establish the Bluetooth connection [Salutation API mapping provides a means to pass SDP primitive attributes to the Bluetooth SDP manager; p. 19, Section 4.3.2 of Miller], and using the connection

information in establishing the Bluetooth connection [Salutation Manager then makes an L2CAP connection with a Bluetooth RemDev; p. 20, Section 4.3.2.1 of Miller]. As to a Winsock module, see the rejection to claim 2 above.

As to claim 4, Miller as modified teaches the connection information provided comprises a Bluetooth address [Salutation Manager maintains a list of SLM-IDs and corresponding RemDev addresses for future SDP activity; p. 20, Section 4.3.2.1, 3rd paragraph]. As to a Winsock module, see the rejection to claim 2 above.

As to claim 5, Miller as modified teaches the connection information comprises a service class ID [Service Classes; p. 21]. As to a Winsock module, see the rejection to claim 2 above.

As to claim 6, Miller as modified teaches the connection information comprises a port value [device ID; p. 20, Section 4.3.2.1]. As to a Winsock module, see the rejection to claim 2 above.

As to claim 7, Miller as modified teaches the connection request specifies a service [SDP client generates a SDP_ServiceSearchRequest to locate service records that match the service search pattern; p. 7, Section 2.1.1], and the connection information comprises SDP information related to the specified service [SDP_ServiceSearchResponse is sent back to the LocDev Salutation Manager containing a list of service record handles for service records that match the ServiceSearchPattern in the request; p. 20, Section 4.3.2.1]. As to a Winsock module, see the rejection to claim 2.

As to claims 9 – 14, these are product claims that correspond to method claims 2 – 7; note the rejection to claims 2 – 7 above, which also meet these product claims.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon - Fri, 8am - 4:30pm.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Li B. Zhen
Examiner
Art Unit 2126

lbz
July 10, 2003



**JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
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